

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A method of positioning a radio transmitter ~~characterized in that~~ comprising

determining distance to a receiver of known position ~~is determined~~ according to a parameter reflecting propagation delay time and ~~that~~

determining direction from the receiver to the transmitter ~~is determined~~ from a respective at least one parameter reflecting received signal level in a cell/sector where the transmitter is camping or being served and signal level in a co-sited cell/sector, the parameter determining direction from stored assisting position data.

2. (Currently Amended) The method according to claim 1, wherein ~~characterized in that~~ the assisting position data is classified in intervals of one or more parameters.

3. (Currently Amended) The method according to claim 2 wherein ~~characterized in that~~ the position data in each interval is averaged over the interval of each of the one or more parameters.

4. (Currently Amended) The method according to claim 3 wherein ~~characterized in that~~ the one or more parameters include received signal level.

5. (Currently Amended) The method according to claim 3 wherein ~~characterized in that~~ the one or more parameters include timing advance.

6. (Currently Amended) The method according to claim 3 wherein ~~characterized in that~~ the stored assisting position data is average position data.

7. (Currently Amended) The method according to claim 1 wherein ~~e-h-a~~
~~r-a-c-t-e-r-i-z-e-d-i-n~~ that the assisting position data is GPS or other satellite positioning
system position data.

8. (Currently Amended) The method according to claim 7 further
comprising ~~e-h-a-r-a-c-t-e-r-i-z-e-d-i-n~~ that for a public mobile radio communication
system with a plurality of subscriber receivers, receiving the assisting position data is
received from one or more of a plurality of subscriber receivers in a public mobile radio
communication system.

9. (Currently Amended) The method according to claim 1 wherein ~~e-h-a~~
~~r-a-c-t-e-r-i-z-e-d-i-n~~ that the co-sited cell/sector is at least one of the cells/sectors being
immediate neighbors of the cell where the transmitter is camping or being served.

10. (Currently Amended) The method according to claim 1 wherein ~~e-h-a~~
~~r-a-c-t-e-r-i-z-e-d-i-n~~ that direction to the transmitter is determined by forming a linear
scale ratio of or dB-scale difference between the neighbor cell/sector received level and
received level of the cell/sector where the transmitter is camping or being served.

11. (Currently Amended) The method according to claim 1 wherein ~~e-h-a~~
~~r-a-c-t-e-r-i-z-e-d-i-n~~ that determination of transmitter positioning includes cell/sector
identity.

12. (Currently Amended) The method according to claim 1 wherein ~~e-h-a~~
~~r-a-c-t-e-r-i-z-e-d-i-n~~ that the received signal level is averaged prior to forming a basis for
positioning.

13. (Currently Amended) The method according to claim 12 wherein ~~e-h-a~~
~~r-a-c-t-e-r-i-z-e-d-i-n~~ that the average is formed in a network control element.

14. (Currently Amended) The method according to claim 13 wherein ~~characterized in that~~ the network control element is an entity most closely connected to the receiver entity over a standardized interface.

15. (Currently Amended) The method according to claim 14 wherein ~~characterized in that~~ the entity most closely connected to the receiver is a base station controller.

16. (Currently Amended) The method according to claim 14 wherein ~~characterized in that~~ the entity most closely connected to the receiver is a radio network controller.

17. (Currently Amended) A device for ~~of~~ positioning a radio transmitter comprising: ~~characterized by~~
processing means for determining;
distance to a receiver of known position according to at least one
parameter reflecting propagation delay time; ~~and~~
direction from the receiver to the transmitter from a respective parameter
reflecting received signal level in a cell/sector where the transmitter is camping or being
served; and
signal level in a co-sited cell/sector, the respectiv parameter determining
direction from stored assisting position data; and
storage means for storing of assisting position data in relation to the at least one
parameter.

18. (Currently Amended) The device according to claim 17 wherein ~~characterized in that~~ the assisting position data is classified in intervals of one or more parameters.

19. (Currently Amended) The device according to claim 18 further comprising ~~characterized by~~ processing means for averaging position data in each interval over the interval of each of the one or more parameters.

20. (Currently Amended) The device according to claim 19 wherein ~~characterized in that~~ the one or more parameters include received signal level.

21. (Currently Amended) The device according to claim 19 wherein ~~characterized in that~~ the one or more parameters include timing advance.

22. (Currently Amended) The device according to claim 19 wherein ~~characterized in that~~ the stored assisting position data is average position data.

23. (Currently Amended) The device according to claim 17 wherein ~~characterized in that~~ the assisting position data is GPS or other satellite positioning system position data.

24. (Currently Amended) The device according to claim 17, wherein ~~7, characterized in that~~ for a public mobile radio communication system with a plurality of subscriber receivers, the assisting position data is received from one or more subscriber receivers.

25. (Currently Amended) The device according to claim 17 wherein ~~characterized in that~~ the co-sited cell/sector is at least one of the cells/sectors being immediate neighbors of the cell where the transmitter is camping or being served.

26. (Currently Amended) The device according to claim. 17 wherein ~~characterized in that~~ direction to the transmitter is determined by forming a ratio of the neighbor cell/sector received level and received level of cell/sector where the transmitter is camping or being served.

27. (Currently Amended) The device according to claim 17 wherein ~~characterized by~~ the processing means further comprises including cell/sector identity determination of transmitter positioning.

28. (Currently Amended) The device according to claim 17 wherein ~~characterized by~~ the processing means further comprises forming a time average of received signal level prior to forming a basis for positioning.

29. (Currently Amended) The device according to claim 28 wherein ~~characterized in that~~ the time average is formed in a network control element.

30. (Currently Amended) The device according to claim 29 wherein ~~characterized in that~~ the network control element is an entity most closely connected to the receiver entity over a standardized interface.

31. (Currently Amended) The device according to claim 30 wherein ~~characterized in that~~ the entity most closely connected to the receiver is a base station controller.

32. (Currently Amended) The device according to claim 30 wherein ~~characterized in that~~ the entity most closely connected to the receiver is a radio network controller.

33 -34. (Canceled)